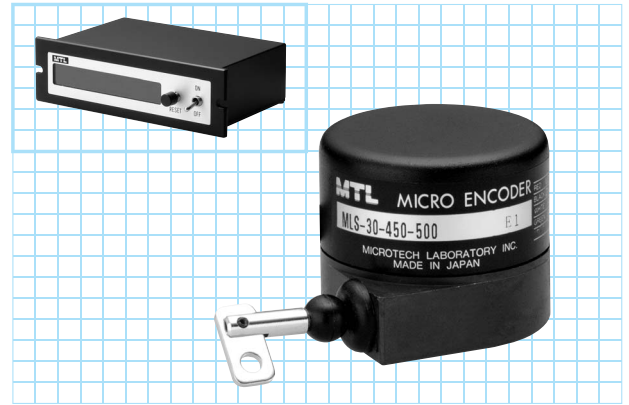
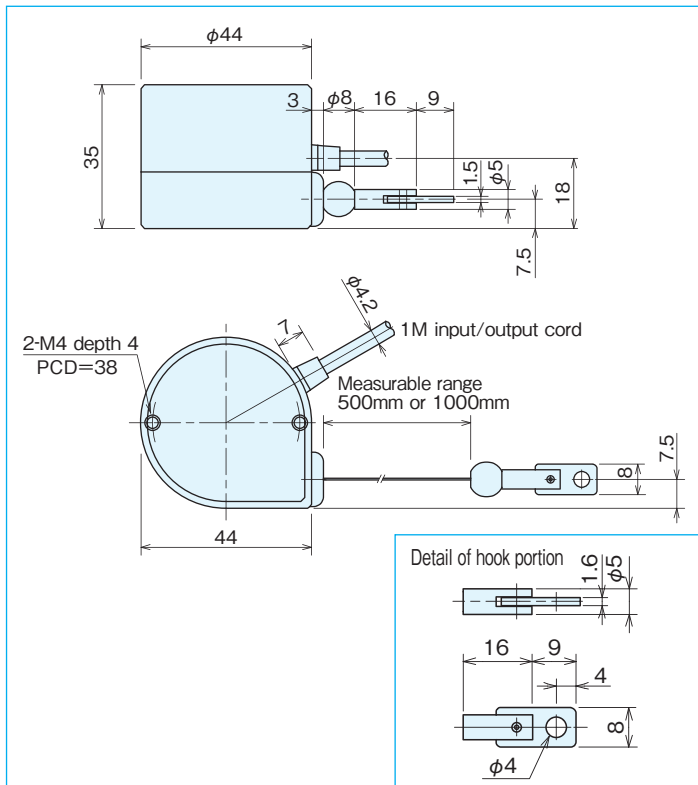


MLS-30 series

[Wire-Type Linear Scale]

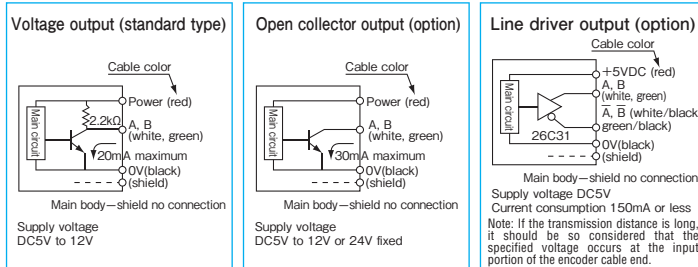


Outside dimensions



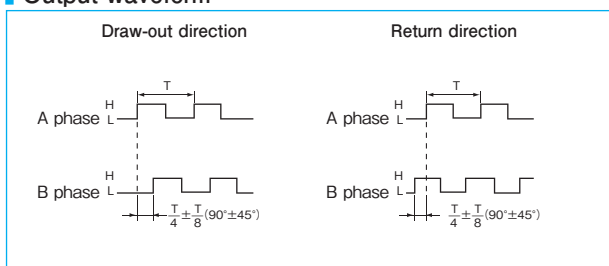
Note: Usage warning: The wire may stop midway through retracting. When this happens, slowly pull out the full length and then slowly retract again before using.

Output circuit diagram



A capacitor (0.1μF) is connected between 0V and FG (frame ground).

Output waveform



Specifications/linear scale encoder (detection portion)

Type name	MLS-30- <input type="text"/> -500-1000			
	Pulse number		Output circuit	
			<ul style="list-style-type: none"> ●No entry=voltage output ●C=open collector output ●E=line driver output ●C4=open collector output DC24V 	
Item	MLS-30-450-500	MLS-30-450-1000	MLS-30-4500-500	MLS-30-4500-1000
Measuring range mm	500	1,000	500	1,000
Output pulse/1mm	5	5	50	50
Stroke speed mm/sec	1,000	1,000	1,000	1,000
Absolute accuracy mm	±0.25	±0.5	±0.25	±0.5
Minimum resolution mm	0.2	0.2	0.02	0.02
Supply voltage	DC5~12V±10% DC24V±10%(option)		DC5~12V±10% DC24V±10%(option)	
Current consumption	60mA or less (under no load)			
Output phase	A phase, B phase			
Output form	Square wave			
Output capacity	Sink current 20mA or less, residual voltage 0.5V or less (at 10mA)			
Response frequency	100kHz			
Output phase	A, B phase difference 90°±45°			
Waveform rise/fall time	2μsec or less			
Wire tensile force	1.4N~2.9N (150~300gf)			
Working ambient temperature/humidity	0°C~50°C / RH35%~90%			
Storage ambient temperature	-20~80°C			
Vibration resistance	Endurance 10 to 55Hz Double amplitude 2 hours each in X, Y, and Z directions			
Impact resistance	Durability 500m/s ² (about 50G) 3 times each in X, Y, and Z directions			
Cable	Insulated shield wire Outside diameter φ4.2 4-core vinyl wire			
Mass	185g			

Note: The output pulse or resolution is possible to 4 multiple with the counter.

Specifications/micro linear scale (detecting portion + indicating portion)

Type name	MLS-30-01-500	MLS-30-01-1000	MLS-30-001-500	MLS-30-001-1000
Measuring range mm	500	1,000	500	1,000
Output pulse/1mm	10	10	100	100
Counter accuracy pulse	±1	±1	±1	±1
Minimum reading	0.1	0.1	0.01	0.01
Power	AC100V 50/60Hz 180mA max			
Counter mode	10 Decimal			
Count indication	0~±999999.9		0~±99999.99	
Reset	Reset switch provided *External signal resetting possible			
External output	*BCD parallel output			
Mass	700g			
Power cord	2m with plug			

Note: For counter specifications, see DC Series. * indicates option.